

ABSTRACT

A method of treating an acute myocardial infarction by administering to an individual an effective amount of a formulation which inhibits and/or depletes phagocytic cells with high specificity, thereby suppressing the inflammatory response that occurs during and following acute myocardial infarction. The formulation comprises an agent which is an intracellular inhibitor that is released within the targeted phagocytic cells, specifically macrophage/monocytes, and inhibits and/or destroys the macrophages and/or monocytes, thereby reducing the final zone of infarct and improving cardiac repair and myocardial remodeling. Since macrophages and monocytes possess the unique ability to phagocytose large bodies, the agent is formulated into a specific size such that it can enter cells primarily via phagocytosis. Thus, the specifically sized formulation selectively targets monocytes/macrophages. The formulation may comprise an encapsulated agent, an embedded agent or a particulate agent, wherein the formulation is of a specific size, such that it can enter cells primarily via phagocytosis. The formulation is preferably in the size range of 0.03-1.0 microns.